Q: Where do I start?

A: Assume you have identified a question, and in order to answer it, you must measure something (usually, a construct).
Respond to these questions:

- *What is it you must measure?*
- *How will measuring this construct answer your question?*
- *Why are you focusing on this and not other related constructs? (In fact, list the other related constructs)*

Be precise!

Q: OK, I've got a specific construct in mind, and a rationale for measuring it to answer my question. Now what?

A: When contemplating how/in whom/with what to measure, we recommend you follow this decision rubric, focusing in turn on
construct precision, quantification precision, and translation precision:

Construct Precision

How precise is your definition of what you want to measure? Even though you think you've identified what it is you want to measure, investigate it further. Constructs can be complex. Consider the following:

Question	*Solution*
Is the construct you want to measure unidimensional, or is it actually a set of related constructs? How do you know this?	*Literature review, theory-centered critical analysis, factor analysis, multi-trait multi-method analysis*
What about the writing quality of the items? Are they written "right"? (technically accurate, readable, elicit anticipated responses)	*Your own review; expert review (if available), small-sample try-out*

Quantification Precision

How dependable is the measurement in producing the same results for the same sample, over and over?

Question	*Solution*
➢ *How consistent, responsive to change, and focused on a cut-point (if this is relevant) is the instrument?*	➢ *Reliability analysis, sensitivity analysis/ determination of MCID, specificity analysis*
➢ *Is it possible to reduce patient/provider burden without losing this information?*	➢ *Prudent choice of instruments/subscales/ items; modern measurement (CAT)*
➢ *How likely am I to see during my career lifespan the availability of CATs in my field?*	➢ *Modern measurement is a topic of rapidly growing interest in medicine; we expect many new CATs to become commercially available in the near future*

Translation Precision

Also known as generalizability. How well does the measurement translate from your study sample to other relevant samples/groups/populations?

Question	*Solution*
➢ *To what extent is the meaning of items similar across different population groups?*	➢ *Follow a comprehensive screening process for selecting the appropriate instrument for your population (e.g., the list of 17 "questions to answer" provided in our presentation)*

For more information, please visit us at www.MeasurementExperts.org
Measurement Excellence and Training Resource Information Center (METRIC)
Department of Veterans Affairs, Health Services Research & Development Service